

# SINGLE DISC ELECTROMAGNETIC CLUTCHES SHAFT MOUNTED CLUTCHES GP.SDC / GP SMC Series



In an Electromagnetic Single Disc Clutch, when the current is applied a strong magnetic field is generated and the armature is pulled towards the rotor for a backlash free transmission of torque. The spring action of the diaphragm ensures a rapid disengagement free from any residual torque.

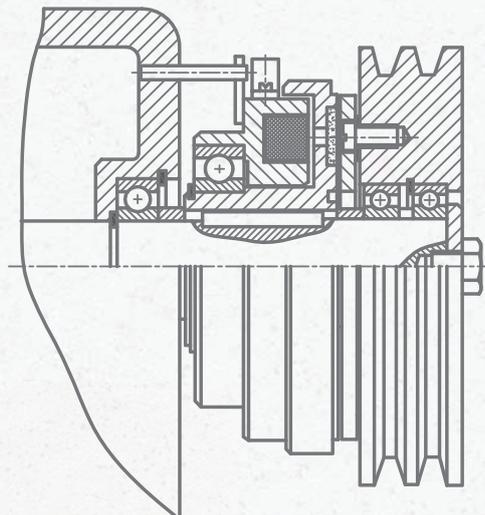
## Technical Features:

- Available with various voltage options (Std. coil voltage 24 Vdc)
- Dry operation
- Torque 08 NM to 480 NM
- Simple design and construction
- High operating frequency
- Asbestos free friction material
- Coil with class 'F' insulation
- With pre-stressed diaphragm (spring) made from hardened spring steel
- Zero backlash
- Horizontal and vertical mounting
- Low maintenance
- Available in various clutch configurations to suit customer requirements

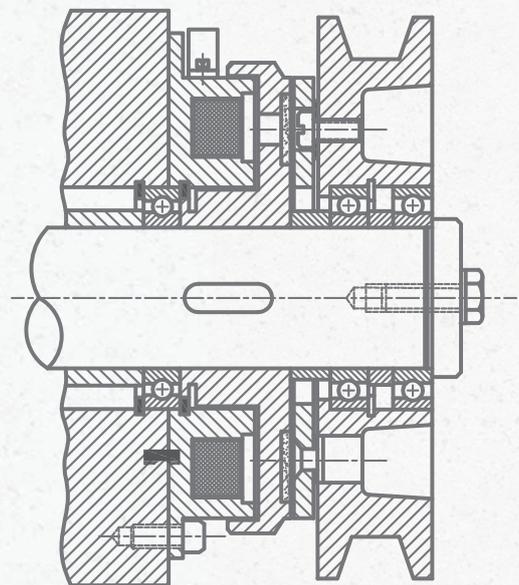
## General Applications :

- Packaging machines
- Printing machines
- Pharmaceutical machines
- Conveyors
- Machine tools
- Textile machinery
- Cranes / Hoists / Material handling equipment
- Wire-drawing machines and various other applications.

## MOUNTING



GPSMC

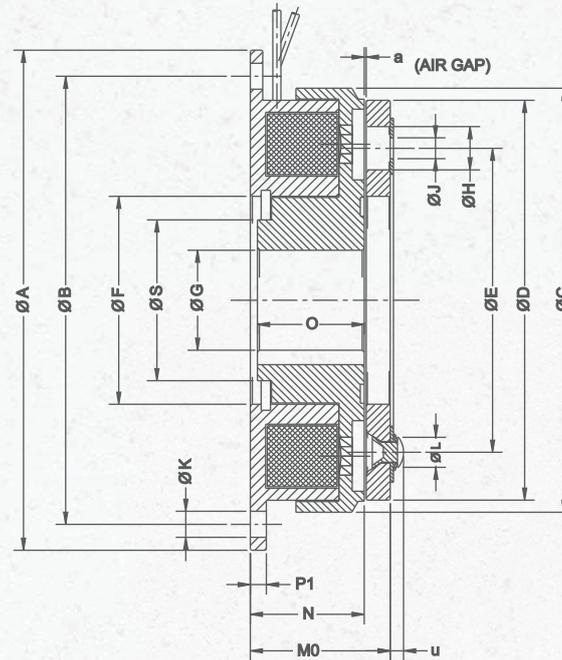


GPSDC

# Dimension Data

## Electromagnetic Clutches GP.SDC Series

### GP.SDC Series Design 1

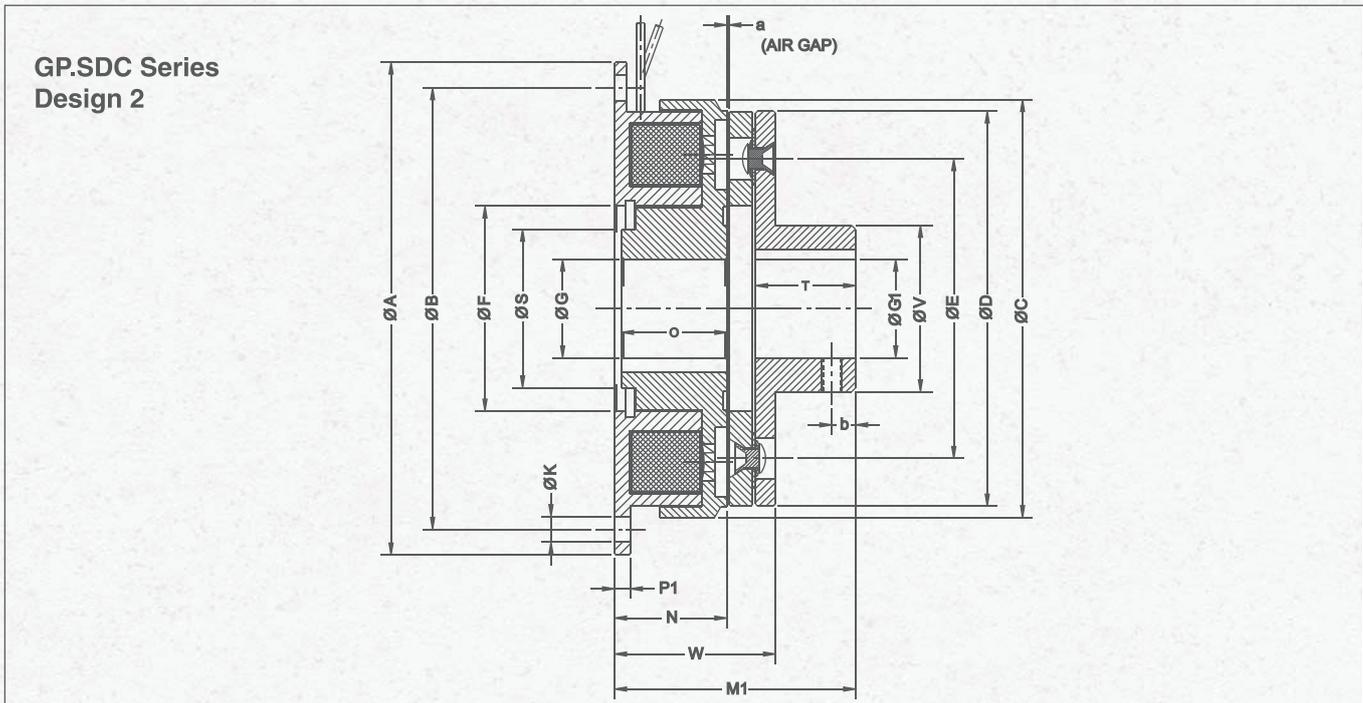


Size	01	02	03	06	10	20	40
<b>Torque in NM</b>	<b>8</b>	<b>15</b>	<b>30</b>	<b>60</b>	<b>120</b>	<b>240</b>	<b>480</b>
Max. Speed (min <sup>-1</sup> )	7,000	6,000	5,000	4,000	3,000	2,500	2,000
Input Power at 20°C (Watts)	15	21	29	36	50	69	86
$\varnothing A_{h9}$	80	100	125	150	190	230	290
$\varnothing B$	72	90	112	137	175	215	270
$\varnothing C$	68	85.5	107	134.5	170	214.5	266.5
$\varnothing D$	63	80	100	125	160	200	250
$\varnothing E$	46	60	76	95	120	158	210
$\varnothing F_{H8}$	35	42	52	62	80	100	125
$\varnothing G_{H7}$	12	15	20	25	30	40	45
$\varnothing H$	6.3	8	10.5	12	15	18	22
$\varnothing J$	3 X 3.1	3 X 4.1	3 X 5.1	3 X 6.1	3 X 8.2	3 X 10.2	4 X 12.2
$\varnothing K$	4 X 4.5	4 X 5.5	4 X 6.6	4 X 6.6	3 X 9	4 X 9	4 X 11
$\varnothing L$	3 X 5.5	3 X 7	3 X 9	3 X 10	3 X 13	3 X 16	4 X 20
$M_0$	28	31	35.9	40.5	46.5	55.4	63.9
$N$	24	26.5	30	33.05	37.5	44	51
$O$	22	24	27	30	34	40	47
$P_1$	3.5	4.3	5	5.5	6	7	8
$\varnothing S$	23	28.5	40	45	62	77	100
$T$	15	20	25	30	38	48	55
$u$	1.6	1.8	2.4	2.8	3.2	4	4.3
$a$	0.2	0.2	0.2	0.3	0.3	0.5	0.5
Max bore $\varnothing G_{H7}$	17	20	30	40	50	65	80
Weight (kg)	0.5	0.9	1.7	3.0	5.5	10.2	18.7

Voltage = 24/96/110/190 - Request for any other Voltage

# Dimension Data

## Electromagnetic Clutches GP.SDC Series

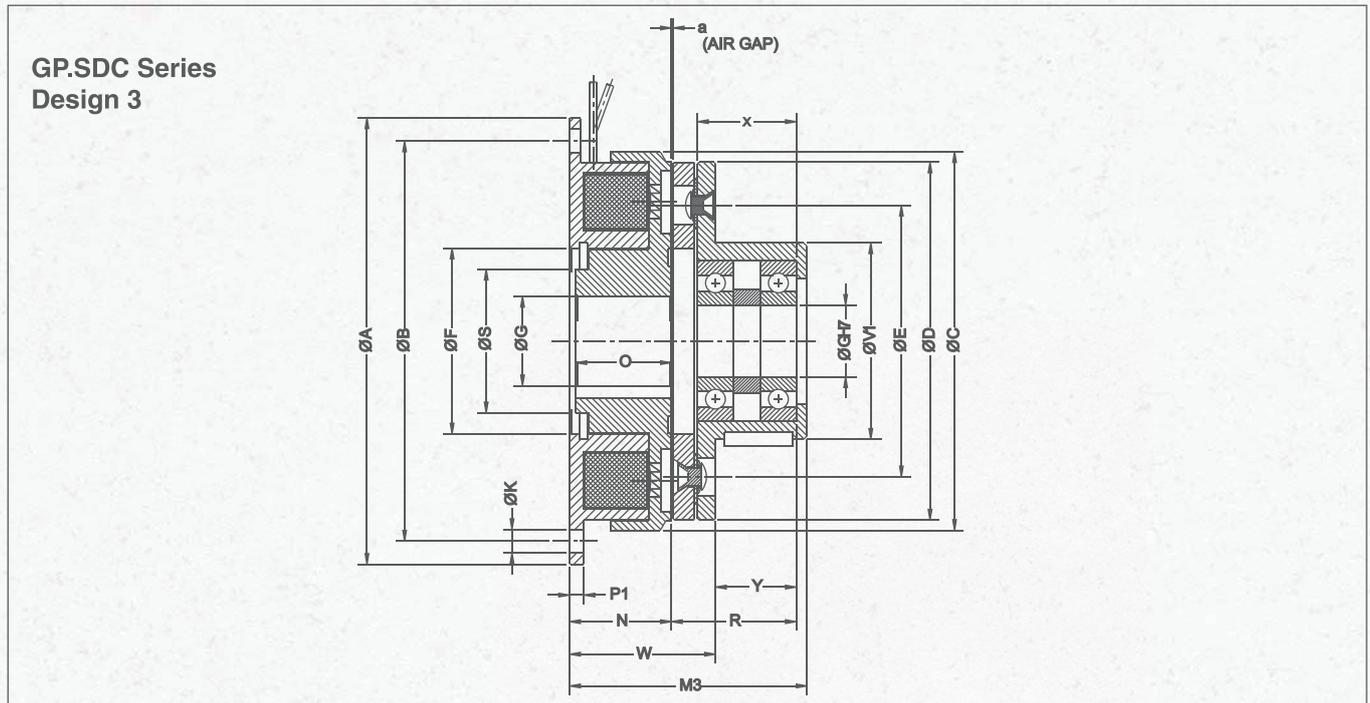


Size	01	02	03	06	10	20	40
<b>Torque in NM</b>	<b>8</b>	<b>15</b>	<b>30</b>	<b>60</b>	<b>120</b>	<b>240</b>	<b>480</b>
Max. Speed (min -1)	7,000	6,000	5,000	4,000	3,000	2,500	2,000
Input Power at 20 °C (Watts)	15	21	29	36	50	69	86
ØAh9	80	100	125	150	190	230	290
ØB	72	90	112	137	175	215	270
ØC	67	85.5	107	134.5	168	214.5	266.5
ØD	63	80	100	125	160	200	250
ØE	46	60	76	95	120	158	210
ØFH8	35	42	52	62	80	100	125
ØGH7	12	15	20	25	30	40	45
ØK	4 X 4.5	4 X 4.5	4 X 6.6	4 X 6.6	4 X 8.5	4 X 9	4 X 11
M <sub>i</sub>	43	51	60.9	70.5	84.5	103.4	118.9
N	24	26.5	28.5	33.05	37.5	43	51
O	22	24	27	30	33	40	47
P <sub>1</sub>	2.0	3	4	4	4	05	06
ØS	23	28.5	40	45	62	77	100
T	15	20	25	30	38	42	55
ØV	28	33	43	50	66	84	106
W	31.5	35	40.9	46.5	53.5	64.4	74.9
a	0.2	0.2	0.2	0.3	0.3	0.5	0.5
b	5	6	6	10	10	15	20
Max bore ØGH7	17	20	30	40	50	65	80
Max bore ØG1H7	17	20	30	35	40	60	80
Weight (kg)	0.6	1.0	1.9	3.3	5.9	11.5	20.5

Voltage = 24/96/110/190 - Request for any other Voltage

# Dimension Data

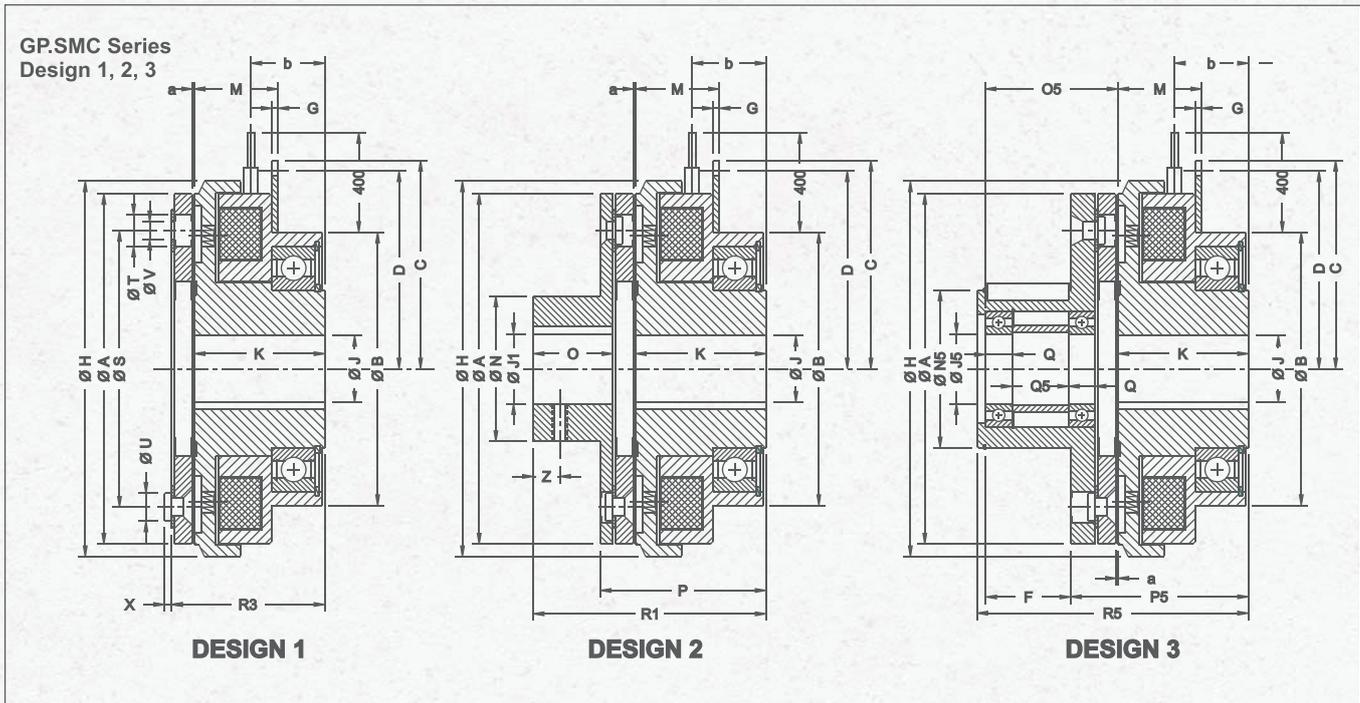
## Electromagnetic Clutches GP.SDC Series



Size	01	02	03	06	10	20	40	
<b>Torque in NM</b>	<b>8</b>	<b>15</b>	<b>30</b>	<b>60</b>	<b>120</b>	<b>240</b>	<b>480</b>	
Max. Speed (min -1)	7,000	6,000	5,000	4,000	3,000	2,500	2,000	
Input Power at 20 °C (W)	15	21	29	36	50	69	86	
<b>D I M E N S I O N S</b>	ØAh9	80	100	125	150	190	290	
	ØB	72	90	112	137	175	270	
	ØC	67	85.5	106	134.5	168	266.5	
	ØD	63	80	100	125	160	250	
	ØE	46	60	76	95	120	210	
	ØFH8	35	42	52	62	80	125	
	ØGH7	12	15	20	25	30	45	
	ØK	4 X 4.5	4 X 4.5	4 X 6.6	4 X 6.6	4 X 8.5	4 X 9	4 X 11
	M <sub>3</sub>	51	63	70.9	86.5	103.5	125.4	144.9
	N	24	26.5	28.5	33.05	37.5	43	51
	O	22	24	27	30	33	40	47
	R	23	30.5	37.09	50	63	78.4	88.9
	ØS	23	28.5	40	45	62	77	100
	ØV <sub>3K6</sub>	38	45	55	64	75	90	115
	W	31.5	35	40.9	46.5	53.5	64.4	74.9
	X	20	23.5	30.5	42	54	64	76
	Y	17	19.5	26.5	36.5	44.5	53.5	64
a	0.2	0.2	0.2	0.3	0.3	0.5	0.5	
Max bore ØGH7	17	20	30	40	50	65	80	
Max bore ØGH7	17	20	30	35	40	60	80	
Weight (kg)	0.7	1.3	2.35	4.0	7.3	14.0	25.5	
Voltage = 24/96/110/190 - Requests for any other Voltage								

# Dimension Data

## Electromagnetic Clutches GP.SMC Series



Size	01	02	03	06	10	20	40
Torque in NM	8	15	30	60	120	240	480
Max. Speed	8,000	6,000	5,000	4,000	3,000	3,000	2,000
Input Power at (20°C) (Watts)	15	20	28	35	50	68	85
D I M E N S I O N S	ØA	63.0	80.0	100.0	125.0	160.0	250.0
	ØB	64.0	68.0	85.0	100.0	127.0	152.4
	C	41.0	50.0	61.0	72.5	99.0	145.0
	D	37.0	46.0	57.0	68.5	93.0	139.0
	F	17.0	22.0	27.0	36.5	44.4	63.5
	G	1.5	1.5	2.5	2.5	3.5	3.5
	ØH	68.0	85.5	107.0	134.3	170.0	214.3
	K	40.0	43.5	49.0	55.0	61.5	74.0
	M	26.0	28.0	32.5	36.0	41.7	48.1
	ØN	27.0	32.0	42.0	49.0	65.0	83.0
	ØN5 k6	38.0	45.0	55.0	64.0	75.0	90.0
	O	15.0	20.0	25.0	30.0	38.0	48.0
	Q5	22.7	32.2	39.4	51.5	63.0	77.9
	P	47.5	52.0	60.0	68.0	77.5	94.4
	P5	47.0	52.0	60.0	68.0	77.5	94.4
	Q	8.0	9.0	12.0	12.0	13.0	15.0
	Q5	4.0	5.5	6.5	18.0	28.0	34.0
	R1	59.0	68.0	80.0	92.0	108.0	133.0
	R3	44.0	48.0	54.9	62.0	70.5	85.4
	R5	67.0	77.0	90.0	108.0	127.5	155.4
	ØS	46.0	60.0	76.0	95.0	120.0	158.0
	ØT	3 X 6.3	3 X 8	3 X 10.5	3 X 12.0	3 X 15.0	3 X 18.0
	ØU	3 X 5.5	3 X 7	3 X 9.0	3 X 10.0	3 X 13.0	3 X 16.0
ØV	3 X 3.1	3 X 4.1	3 X 5.15	3 X 6.1	3 X 8.2	3 X 10.2	
X	1.4	1.7	2.1	2.5	3.0	4.0	
Z	5.0	6.0	6.0	10.0	10.0	15.0	
a	0.2	0.2	0.2	0.3	0.3	0.5	
b	22.0	24.0	27.5	29.5	35.0	42.5	
ØJ <sup>H7</sup>	10,15	17,20	20,25,30	20,25,30	25,30,40	40,45,50	
	20	25	30	40	50	60	
ØJ1 <sup>H7</sup>	10	10	14	14	20	25	
	10,12,15	14,17,20	20,25,28	25,28,30	30,35,40	40,45,50	
	17	20	30	35	45	60	
ØJ5 <sup>H7</sup>	12.0	15.0	20.0	25.0	30.0	40.0	
Voltage = 24/96/110/190 - Requests for any other Voltage							

\* Pilot bored no keyway O J1  
\*\* Standard bores.  
\*\*\* Max. bores